

=> s synthetic wood

L1 838 SYNTHETIC WOOD

=> s antibacterial or antimicrobial or fungicid? or bactericid? or microbicid? or viricid? or antiviral or bacteri? or fungus

L2 936966 ANTIBACTERIAL OR ANTIMICROBIAL OR FUNGICID? OR BACTERICID? OR MICROBICID? OR VIRICID? OR ANTIVIRAL OR BACTERI? OR FUNGUS

=> s l1 and l2

L3 14 L1 AND L2

=> d ti 1-14

L3 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Environment-friendly fire-resistant multilayer wood board and its manufacture

L3 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Process for production of antibiotic flooring board with nano silver ion and antibiotic laminate flooring board

L3 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Kitchen panel with improved soiling resistance

L3 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Insect-repellent kitchen panels

L3 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Insect-repellent kitchen panels

L3 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Insect-repellent kitchen boxes

L3 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synthetic wood materials containing antimicrobial agents

L3 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Surgical face mask filtering medium

L3 ANSWER 9 OF 14 CAPLUS COPYRIGHT 2007 ACS on STN

TI Synthetic wood

L3 ANSWER 10 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN

TI US DEMAND SET TO GROW FOR SPECIALTY PLASTICS ADDITIVES.

L3 ANSWER 11 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN

TI ADDCON WORLD 2005. Proceedings of the 11th International Plastics Additives and Modifiers conference, held Hamburg, 21st-22nd Sept.2005.

L3 ANSWER 12 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN

TI NORTH AMERICAN MARKET FOR WPC GROWING AT 9.9 PERCENT ANNUALLY.

L3 ANSWER 13 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN

TI WOOD-FILLED PLASTICS - THEY NEED THE RIGHT ADDITIVES FOR STRENGTH, GOOD

## LOOKS AND LONG LIFE.

L3 ANSWER 14 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN  
 TI DO FUNGI COLONIZE AND DISCOLOR RIGID PVC-WOOD FLOUR COMPOSITE LUMBER?

=> d ibib abs hit 7 9 13 14

L3 ANSWER 13 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN  
 ACCESSION NUMBER: R:921852 RAPRA <<LOGINID:20071115>>  
 FILE SEGMENT: Rapra Abstracts  
 TITLE: WOOD-FILLED PLASTICS - THEY NEED THE RIGHT ADDITIVES FOR STRENGTH, GOOD LOOKS AND LONG LIFE.  
 AUTHOR: Sherman L M  
 SOURCE: Plastics Technology 50, No.7, July 2004, p.52/9  
 ISSN: 0032-1257  
 CODEN: PLTEAB  
 PUBLICATION YEAR: 2004  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AN R:921852 RAPRA <<LOGINID:20071115>>  
 AB Wood-filled plastics composites are a rapidly growing market with applications in decking, railings, fencing, doors, window frames, outdoor spas, gazebos, roofing, and sidings. Suppliers are busy identifying optimum choices of existing additives and also developing new ones, to enhance physical properties, durability, and appearance. This article looks at what is available for wood-plastic composites in the realm of coupling agents, lubricants, colourants, chemical foaming agents, and biocides.  
 CT ADDITIVE; ALKENE POLYMER; ANTIFUNGAL; ANTIMICROBIAL AGENT; APPEARANCE; APPLICATION; BIOCIDES; BLOWING AGENT; BOND; BONING; BUILDING APPLICATION; CHEMICAL; CHEMICAL STRUCTURE; COLORANT; COLOURANT; COMPANIES; COMPANY; COMPATIBILISER; COMPATIBILIZER; COMPOSITE; CONCENTRATE; COUPLING AGENT; CREEP RESISTANCE; CREEP RESISTANT; DECKING; DECOMPOSITION; DEGRADATION; DESIGN; DEVELOPMENT; DIMENSIONAL STABILITY; DISCOLORATION; DISCOLOURATION; DISPERSION; DOOR; DURABILITY; ECONOMIC INFORMATION; ELASTICITY; ELASTOMER; ETHYLENE POLYMER; ETHYLENE TERPOLYMER; EXTRUDER; EXTRUDING; EXTRUSION; FADE RESISTANCE; FADING; FENCING; FIBER; FIBRE; FIBRE-REINFORCED PLASTIC; FILLER; FLEXURAL MODULUS; FLEXURAL PROPERTIES; FLUOROCARBON RUBBER; FLUOROELASTOMER; FLUORORUBBER; FOAMING; FOAMING AGENT; FORECAST; FORMULATION; FRAME; GRAFT; GRAFTING; GRANULE; HDPE; HIGH DENSITY POLYETHYLENE; IMPACT PROPERTIES; IMPACT RESISTANCE; IMPACT RESISTANT; INDUSTRY; LOAD BEARING; LOADBEARING; LOADING; LUBRICANT; LUBRICATION; MACHINE; MACHINERY; MAINTENANCE; MANUFACTURER; MARKET GROWTH; MARKET SHARE; MATERIAL REPLACEMENT; MATERIALS SELECTION; MATERIALS SUBSTITUTION; MATRIX; MECHANICAL PROPERTIES; MODIFIED; MODULUS OF RUPTURE; MOISTURE RESISTANCE; MOLD; MOLECULAR STRUCTURE; MOULD; NATURAL FIBER; NATURAL FIBRE; OLEFIN POLYMER; OPTICAL PROPERTIES; OUTDOOR APPLICATION; PARTICLE SIZE; PE; PERFORMANCE; PHYSICAL PROPERTIES; PIGMENT; PLASTIC; POLYALKENE; POLYETHYLENE; POLYOLEFIN; POLYPROPENE; POLYPROPYLENE; POLYSTYRENE; POLYVINYL CHLORIDE; PP; PRICE; PROCESS; PROCESSING; PRODUCT ANNOUNCEMENT; PROPERTIES; PROTECTION; PS; PVC; RAILING; RECYCLATE; RECYCLED; RECYCLING; REINFORCED PLASTIC; REINFORCED PLASTICS; REINFORCEMENT; RESIN; ROOFING; SIDING; SPA; SPEED; SPLITTING; STAINING; STATISTICS; STIFFNESS; STRENGTH;

SUPPLIER; SURFACE; SYNTHETIC WOOD; TARGET; TEMPERATURE; TENSILE PROPERTIES; TENSILE STRENGTH; TEST; TEST METHOD; TESTING; THERMOPLASTIC; THERMOSET; TORQUE; WARPAGE; WATER ABSORPTION; WEATHERABILITY; WEIGHT REDUCTION; WINDOW FRAME; WOOD; WOOD FIBER-REINFORCED PLASTIC; WOOD FIBRE-REINFORCED PLASTIC

L3 ANSWER 14 OF 14 RAPRA COPYRIGHT 2007 RAPRA on STN  
 ACCESSION NUMBER: R:906678 RAPRA <<LOGINID:20071115>>  
 FILE SEGMENT: Rapra Abstracts  
 TITLE: DO FUNGI COLONIZE AND DISCOLOR RIGID  
 PVC-WOOD FLOUR COMPOSITE LUMBER?  
 AUTHOR: Dawson-Andoh B E; Matuana L M; Harrison J  
 CORPORATE SOURCE: West Virginia, University; Michigan, State University;  
 US, National Inst. for Occupational Safety & Health  
 SOURCE: Vinyltec 2003. Polyvinyl Chloride: The Versatile  
 Plastic. Proceedings of a conference held Huron, Oh.,  
 27th-29th Oct. 2003  
 Editor(s): SPE, Vinyl Div.; SPE, Ohio Firelands Section  
 Brookfield, Ct., SPE, 2003, Paper 21, pp.12, CD-ROM,  
 012  
 PUBLICATION YEAR: 2003  
 DOCUMENT TYPE: Conference Article  
 LANGUAGE: English  
 AN R:906678 RAPRA <<LOGINID:20071115>>  
 AB Rigid PVC-wood flour composite lumber containing either maple or pine  
 wood flour (50%) was exposed to fungi for 2 and 4 weeks,  
 respectively, according to ASTM Standard G-21 96. Both types of rigid  
 PVC-wood flour composite lumber were colonised and discoloured by  
 fungi. Bottom faces of composites that were in constant contact  
 with moisture exhibited greater susceptibility to fungal discolouration.  
 The lumber containing maple wood flour demonstrated higher fungal  
 discolouration than that containing pine wood flour. Environmental SEM  
 studies indicated that surface breaks in PVC matrix could cause wood  
 flour filler to be exposed to the environment. The wood flour thus became  
 a source of water sorption and subsequent fungal colonisation and  
 discolouration. 5 refs.  
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 studies indicated that surface breaks in PVC matrix could cause wood  
 flour filler to be exposed to the environment. The wood flour thus became  
 a source of water sorption and subsequent fungal colonisation and  
 discolouration. 5 refs.  
 CT ADDITIVE; APPLICATION; BIODEGRADATION; BIODETERIORATION; BUILDING  
 APPLICATION; COMPOSITE; DATA; DISCOLORATION; DISCOLOURATION;  
 ENVIRONMENTAL SCANNING ELECTRON MICROSCOPY; FILLER; FUNGAL RESISTANCE;  
 GRAPH; INSTITUTION; MOISTURE ABSORPTION; PLASTIC; POLYVINYL CHLORIDE;  
 PROPERTIES; PVC; RIGID; SCANNING ELECTRON MICROSCOPY; SORPTION; SURFACE  
 PROPERTIES; SYNTHETIC WOOD; TABLES; TECHNICAL; THERMOPLASTIC;

TIME; WOOD  
SHR VINYL CHLORIDE POLYMERS, fillers, synthetic wood,  
biodegradation; FILLERS OF, wood flour; FILLERS IN, PVC;  
SYNTHETIC WOOD, PVC, biodegradation; BIODEGRADATION,  
fungal, synthetic wood, PVC

=> d his

(FILE 'HOME' ENTERED AT 08:08:59 ON 15 NOV 2007)

FILE 'CAPLUS, RAPRA' ENTERED AT 08:13:31 ON 15 NOV 2007

L1 838 S SYNTHETIC WOOD  
L2 936966 S ANTIBACTERIAL OR ANTIMICROBIAL OR FUNGICID? OR BACTERICID? OR  
L3 14 S L1 AND L2

FILE 'STNGUIDE' ENTERED AT 08:20:31 ON 15 NOV 2007

FILE 'CAPLUS, RAPRA' ENTERED AT 08:23:10 ON 15 NOV 2007

=> s antifungal

L4 31912 ANTIFUNGAL

=> s l2 or l4

L5 941698 L2 OR L4

=> s polyethylene or LDPE or HDPE

L6 475056 POLYETHYLENE OR LDPE OR HDPE

=> s composite

L7 498918 COMPOSITE

=> s l1 or l7

L8 499519 L1 OR L7

=> s synthetic

L9 667507 SYNTHETIC

=> s l7 or l9

L10 1130876 L7 OR L9

=> s l2 and l6 and l10

L11 1398 L2 AND L6 AND L10

=> s l2 and l6

L12 10326 L2 AND L6

=> s l5 and l6

L13 10377 L5 AND L6

=> s l13 and l7

L14 434 L13 AND L7

=> s need

L15 250820 NEED

=> s 114 and 115

L16 5 L14 AND L15

=> d ti 1-5

L16 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Ecocomposites using cellulose based nanocomposites

L16 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Alginate foam compositions

L16 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2007 ACS on STN  
TI Manufacture of heat-insulating and finishing materials from cellulose and thermoplastic polymers

L16 ANSWER 4 OF 5 RAPRA COPYRIGHT 2007 RAPRA on STN  
TI WOOD-FILLED PLASTICS - THEY NEED THE RIGHT ADDITIVES FOR STRENGTH, GOOD LOOKS AND LONG LIFE.

L16 ANSWER 5 OF 5 RAPRA COPYRIGHT 2007 RAPRA on STN  
TI ADDITIVES FOR WOOD - POLYMER COMPOSITES.

L16 ANSWER 5 OF 5 RAPRA COPYRIGHT 2007 RAPRA on STN  
ACCESSION NUMBER: R:892564 RAPRA <<LOGINID::20071115>>  
FILE SEGMENT: Rapra Abstracts  
TITLE: ADDITIVES FOR WOOD - POLYMER COMPOSITES.  
AUTHOR: Karayan V  
CORPORATE SOURCE: Clariant  
SOURCE: Polyolefins 2003. Proceedings of a conference held Houston, Tx., 24th-26th Feb. 2003.  
Editor(s): SPE, South Texas Section; SPE, Thermoplastic Materials & Foams Div.; SPE, Polymer Modifiers & Additives Div.  
Brookfield, CT, SPE, 2003, p.455-470, 27 cm, 012  
PUBLICATION YEAR: 2003  
DOCUMENT TYPE: Conference Article  
LANGUAGE: English

AN R:892564 RAPRA <<LOGINID::20071115>>

AB The need for additives in the formulation of wood-polymer composites is discussed with reference to the range of masterbatches available from Clariant. Additives in wood-polymer composites are required to enhance and facilitate both processing and performance characteristics. The former category comprises processing aids and coupling agents, whilst the latter includes UV stabilisers, foaming agents, colorants, flame retardants and antimicrobial agents. The dual functions of foaming agents and coupling agents are also discussed.

TI ADDITIVES FOR WOOD - POLYMER COMPOSITES.

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foaming agents, colorants, flame retardants and antimicrobial agents. The dual functions of foaming agents and coupling agents are also discussed.

CT ADDITIVE; ANTIMICROBIAL AGENT; APPLICATION; BLOWING AGENT;  
BUILDING APPLICATION; COLOR RETENTION; COLORANT; COLOUR RETENTION;  
COLOURANT; COMPANIES; COMPANY; COMPOSITE; COST; COSTS; COUPLING  
AGENT; DATA; DENSITY; DUCTILITY; DURABILITY; ETHYLENE POLYMER; EXTRUDING;  
EXTRUSION; FIBRE-REINFORCED PLASTIC; FILLER; FLAME PROOFING; FLAME  
RETARDANCE; FLAME RETARDANT; FLEXURAL PROPERTIES; FOAMING AGENT;  
FURNITURE; GRAPH; HDPE; HIGH DENSITY POLYETHYLENE;  
IMPACT PROPERTIES; IMPACT RESISTANCE; IMPACT RESISTANT; LDPE;  
LOW DENSITY POLYETHYLENE; MASTERBATCH; MECHANICAL PROPERTIES;  
MOISTURE RESISTANCE; OUTDOOR APPLICATION; PE; PLASTIC;  
POLYETHYLENE; POLYPROPENE; POLYPROPYLENE; POLYSTYRENE; POLYVINYL  
CHLORIDE; POLYVINYL BENZENE; PP; PROCESS; PROCESSING; PROCESSING AID;  
PROFILE; PS; PVC; REINFORCED PLASTIC; REINFORCED PLASTICS; STABILISER;  
STIFFNESS; STYRENE POLYMER; TECHNICAL; THERMOPLASTIC; UV STABILISER; UV  
STABILIZER; WEIGHT REDUCTION; WOOD FIBER-REINFORCED PLASTIC; WOOD  
FIBRE-REINFORCED PLASTIC